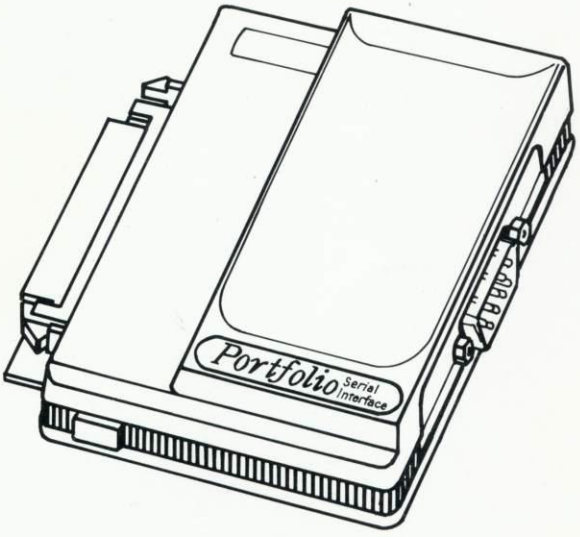
ATARI COMPUTER

Portfolio™

Serial Interface

(Model HPC-102)



Owners Manual

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ATARI

INTRODUCTION

The Portfolio Serial Interface is an optional peripheral that plugs into the bus expansion connector on the right side of the Portfolio. The serial interface provides RS232-C compatibility.

This guide is designed to help you correctly install and use the Portfolio Serial Interface. With the interface you can connect the Portfolio to any RS232-C interfaced device such as a serial printer or modem. The RS232-C connector is a standard male, 9 pin, D-type connector.

You can use the Portfolio Serial Interface to:

- Print Portfolio files on a serial printer.
- Transfer files between Portfolio and an IBM PC, AT, PS/2 or compatible with appropriate software.

Note: Portfolio's power consumption is higher when using the serial interface than in normal use. We suggest you use an A.C. adapter for Portfolio when using the serial interface.

EQUIPMENT

If you wish to use your Portfolio Serial Interface to print or transfer files you must provide additional equipment.

Equipment Needed for Printing

- A printer with an RS232-C serial interface. A printer supporting the IBM extended character set is preferred.
- An RS232-C shielded cable. Cable ends must be: one 9-pin female D-type connector for the Serial Interface, and one appropriate connector for the printer.

  (See **Appendix C, Portfolio Serial Cable Pinouts and Cable Wiring Diagrams** for typical cable wiring.)

- Optional: A small screwdriver to attach the connectors to the Portfolio and printer.

Equipment Needed for File Transfer or Modem

- An RS232-C shielded cable. Cable ends must be: one 9-pin female D-type connector for the serial interface, and one appropriate connector for the IBM PC or compatible, or modem.

  (See **Appendix C, Portfolio Serial Cable Pinouts and Cable Wiring Diagrams** for typical cable wiring.)

- File transfer or telecommunications software.
- Optional: A small screwdriver to attach the connectors to the Portfolio and IBM PC compatible.

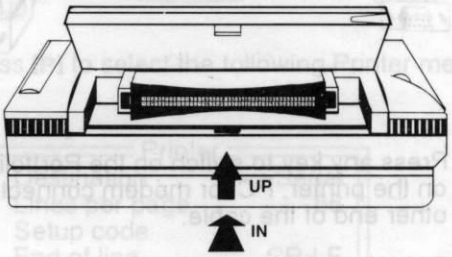
INSTALLING THE INTERFACE

Follow these instructions to install the interface:

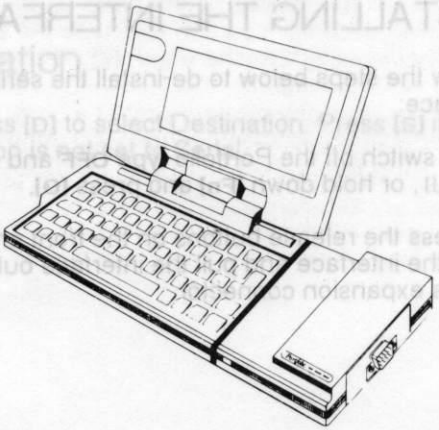
1. Use one of the following methods to switch off the Portfolio:

   Type **OFF** and press [↵], hold down **[Fn]** and press **[O]**.

2. Turn Portfolio on its back. Press the outer edge of the expansion bus cover in and up as shown in the diagram.

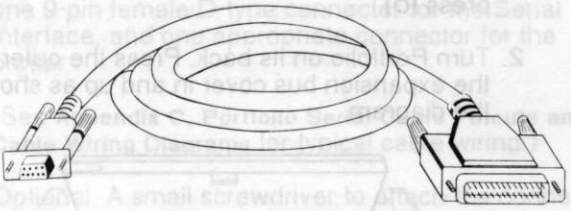


3. Slide the Portfolio Serial Interface into the bus connector as shown below.



Continue to slide the Portfolio Serial Interface into the bus connector until you hear clicks as the retaining clips engage.

4. Connect the appropriate shielded cable for file transfer, modem, or printing to the Portfolio and the other device. A modem cable is shown below.



5. Press any key to switch on the Portfolio. Switch on the printer, PC, or modem connected to the other end of the cable.

6. Refer to the following sections for serial communications setup.

DE-INSTALLING THE INTERFACE

Follow the steps below to de-install the serial interface:

1. To switch off the Portfolio type **OFF** and press [↵], or hold down **[Fn]** and press **[O]**.

2. Press the release buttons on the front and back of the interface and pull the interface out of the bus expansion connector.

PREPARING TO PRINT FROM INTERNAL APPLICATIONS

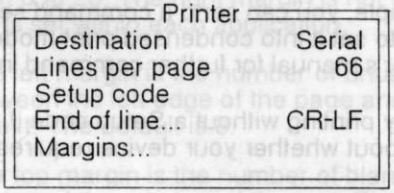
Follow these instructions to print from internal applications:

1. First set up the printer parameters in Setup.

   Display the Applications menu. Press **[Ctrl] [S]** to select Setup.

   Note: If you are in another application or within DOS, hold down **[⅄]** and press **[S]** to select Setup.

2. Press **[P]** to select the following Printer menu:



Destination

Press **[D]** to select Destination. Press **[S]** if the destination is not set to Serial.

Lines per Page

Choose from 41 to 99 lines per page, depending on your paper length. The standard page length for 8½ x 11 paper and the default for this option is 66 lines.

Set the number of lines per page to 0 if you are using continuous forms and want no page breaks.

Note: Portfolio does not pause between printing individual pages.

Setup Code

This option allows you to send a command sequence of instructions of up to 128 characters to the printer. For example, you can send a command sequence to a printer to set it into condensed print mode. Refer to the printer's manual for further command information.

Note: Try printing without a Setup code if you are unsure about whether your device requires one.

If you wish to send a control character, prefix it with a backslash **[\]** followed by the three figure ASCII number in decimal. You can also type the control character directly with the **[Shift] [6]** (^) prefix.

For example, many printers accept a code of **[Ctrl] [O]** (decimal 15) to select condensed print. In this case, press **[\]** and type in **015**, or **[Shift] [6]** and then **[O]**.

End of Line

Some printers expect a carriage return (CR) or a line feed (LF) or both at the end of each printed line. Check your printer's manual for the correct line ending.

The most common line ending is CR-LF. Try printing with CR-LF. If the output is double-spaced (if there is a blank line between each line of text) select CR.

If printing is single-spaced with CR-LF and you want double-spaced text, set this option to CR-LF-LF.

Margins

Use this option to set the top, bottom and left margins.

You can set the above three margins for any value from 0 to 20. The right margin is not set using Setup, but is set within each application.

The left margin is the number of unused columns between the left edge of the page and the main body of text. The default is 8.

The top margin is the number of blank lines between the top of the paper and the text. The default is 6.

The bottom margin is the number of blank lines below the text before the bottom of the paper. The default is 2.

The number of lines printed on each page is determined by the top margin, the bottom margin and the Lines Per Page command described above. The number of lines per page includes the top margin and the bottom margin. Since this default is 66, the default number of text lines on each page is 58 (66 - 6 - 2 = 58).

PREPARING THE INTERFACE FOR PRINTING

If you restarted Portfolio, (pressed **[Ctrl] [Alt] [Del]**, reset or cold-booted), the Portfolio Serial Interface will assume the default settings of 2400 baud rate, No parity, 8 data bits and 1 stop bit. Setup's RS232-C port menu can be used to change these values.

The RS232-C port menu displays current values and allows you to change them but will not have initialized the interface to these values. Select Initialize from the Setup menu to set the new values. You must reset the values and re-initialize after any form of restart.

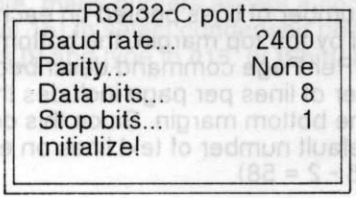
Setting Parameters

Use the following procedure to change parameters:

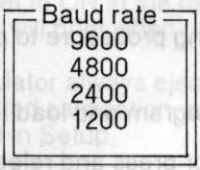
Display the Applications menu. Press **[S]** to select Setup.

Note: Hold down **[⅄]** and press **[S]** if you are in another application or DOS.

Press **[R]** to select the RS232-C port menu. Choose from the following options:



Press **[B]** to display the following menu:



Use the cursor keys to move between the selections. Press [↵] to select the baud rate next to the cursor, or type the first number of the desired baud rate and press [↵].

Note: To display baud rate selections below 1200 press **[Down Arrow]** repeatedly.

Use the baud rate selection method for setting Parity, Data bits, and Stop bits. The settings and their allowed values are shown below.

Communication Parameters

Baud rate	9600, 4800, 2400, 1200, 600, 300, 150, 110
Parity	None, Even, Odd
Data bits	8, 7
Stop bits	1, 2

Warning: After installing, warm/cold-booting, resetting or changing parameters you must select Initialize to use the new settings.

PRINTING FROM INTERNAL APPLICATIONS

Use the following procedure to print from internal applications:

1. Enter the program and load the file to print.
2. Press **[F1]** (or press and release **[ʌ]**) to view the applications main menu.
3. Follow the application specific instructions below.

Address Book, Editor, Diary

Press **[Ctrl] [F]** to select the Files menu, and **[Ctrl] [P]** to print.

The message **Printing...** will display. Press **[Esc]** at any time to stop printing. On successful completion of printing, the last page is ejected (with a form feed character).

If the printer attempts to print beyond the right edge of the paper, either reduce the left margin or reduce the width of your text from within the application.

Worksheet

Spreadsheets are often wider than standard paper widths. You can print portions of a spreadsheet by selecting **Files...** to **Print...** to **Range.**

Any portion of the spreadsheet which extends beyond the right margin prints on the next page before the lower parts of the sheet.

To initiate printing, select Go! from the **Files...** to **Print** menu.

Calculator

If the printer is set to ON in the calculator's menu, each calculation will print when [↵] is pressed.

Note: The calculator always ejects a page at the end of each printed calculation, even if the page length is set to 0 in Setup.

PRINTING FROM DOS

You can print a file directly from the DOS command. Type:

COPY FILENAME.EXT AUX [↵].

This will ignore the margins and other settings in Setup.

You cannot use the print screen key combination (**[Fn] [P]** or **[Ctrl] [Fn] [P]**) to print with the Portfolio Serial Interface.

PORTFOLIO TO PORTFOLIO COMMUNICATION

Each end of the RS232-C cable used must have a loopback from the DTR to the DSR pin, and a loopback from the CTS to the RTS. (See **Appendix C, Portfolio Serial Cable Pinouts and Cable Wiring Diagrams** for wiring diagrams.)

Each Atari Portfolio computer needs a Portfolio Serial Interface. All other types of file transfers require only one Portfolio Serial Interface.

Note: Communications software is necessary for file transfers between the Atari Portfolio and an IBM PC compatible computer, or Portfolio to Portfolio. Portfolio's built-in file transfer software is designed for the Smart Parallel Interface only.

APPENDIX A
ERROR MESSAGES

FILE NOT FOUND

The filename specified is incorrect or the file does not exist.

NOT READY ERROR

This message displays if the Portfolio Serial Interface cannot communicate with your printer, or the serial interface is not set up correctly.

Check that the printer is switched on and the cable is connected.

From the Setup menu, check that the printer is set to serial and that the baud rate, parity, data bits and stop bits are correct at both ends.

Finally, check that the printer cable has been correctly wired.

TIMEOUT ERROR

This message displays if the Portfolio Serial Interface cannot communicate with your printer, or the Portfolio Serial Interface is not set up correctly.

Check that the printer is switched on and the cable is connected.

From the Setup menu, check that the printer is set to serial and that the baud rate, parity, data bits and stop bits are correct at both ends.

Finally, check that the printer cable has been correctly wired.

APPENDIX A
ERROR MESSAGES

Note: Communications software is designed for
file transfers between
PC compatible computer, or Portfolio to Portfolio.
Portfolio's built-in file transfer software is designed
for the Smart Parallel interface on

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The filename specified is incorrect or the file does
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NOT READY ERROR

This message displays if the Portfolio Serial Inter-
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Check that the printer is switched on and the cable is
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From the Setup menu, check that the printer is set to
serial and that the baud rate, parity, data bits and
stop bits are correct at both ends.

Finally, check that the printer cable has been correctly
wired.

TIMEOUT ERROR

This message displays if the Portfolio Serial Inter-
face cannot communicate with your printer, or the
Portfolio Serial Interface is not set up correctly.

Check that the printer is switched on and the cable
is connected.

From the Setup menu, check that the printer is set to
serial and that the baud rate, parity, data bits and
stop bits are correct at both ends.

Finally, check that the printer cable has been correctly
wired.

APPENDIX B
TROUBLESHOOTING

Printer prints everything on one line

Select the CR-LF option on the **Printer...** to **End of Line** section or, if this is already set, select CR-LF-LF.

Printer does nothing

Make sure that the printer has not run out of paper.

Check the cable connections and make sure that the printer is switched on and on line.

Check the baud rate, parity, data bits, and stop bits at the sending and receiving ends.

Initialize the Portfolio if any of the parameters have changed. Check the parameters, then select Initialize from the RS232-C port menu.

Application says printing; printer does nothing

Check that the output destination on the Printer menu. Select the Serial option and not File or Parallel.

Check the cable connections and make sure that the printer is switched on and on line.

Check the baud rate, parity, data bits, and stop bits at the sending and receiving ends.

Initialize the Portfolio if any of the parameters have changed. Check the parameters, then select Initialize from the RS232-C port menu.

Printer is not leaving top and bottom margins

The printer will not form feed if page length is set to 0. Set page length to 66 for 8½ x 11 paper.

Printer is printing top and bottom margins at wrong place

Make sure your printer "knows" where the top of the page is. If your printer has a TOF button, use the button to set the top of form.

The page length setting may be incorrect for the paper being used. Vary the page length setting in the **Setup...** to **Printer** menu until the correct value is obtained.

Lost characters during transmission

Select a lower baud rate at both the sending and receiving ends, or make sure cable wiring provides for proper "handshaking."

Characters received, but incorrect

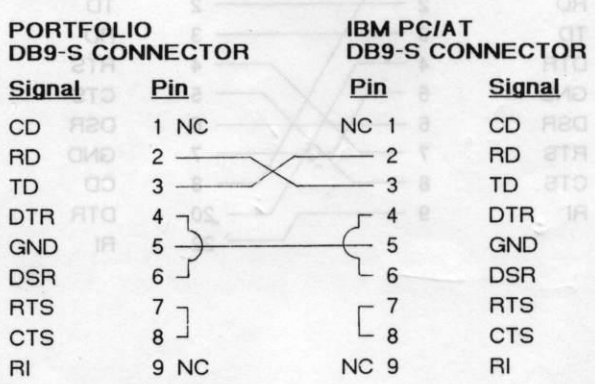
Check parity, data bits, stop bit settings and baud rates. Match these settings at the sending and receiving ends.

APPENDIX C
PORTFOLIO SERIAL CABLE PINOUTS AND CABLE WIRING DIAGRAMS

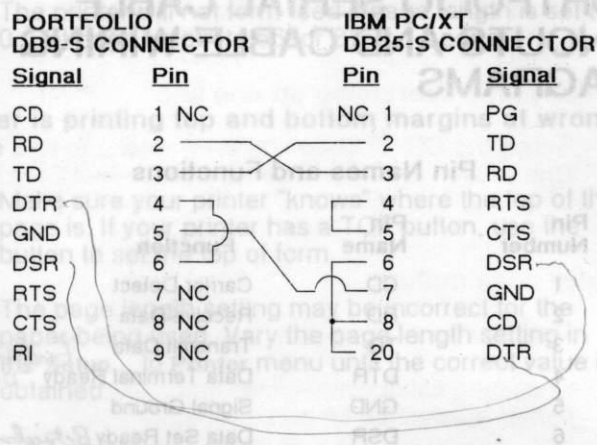
Pin Names and Functions

Pin Number	Pin Name	Function
1	CD	Carrier Detect
2	RD	Receive Data
3	TD	Transmit Data
4	DTR	Data Terminal Ready
5	GND	Signal Ground
6	DSR	Data Set Ready
7	RTS	Request To Send
8	CTS	Clear To Send
9	RI	Ring Indicator

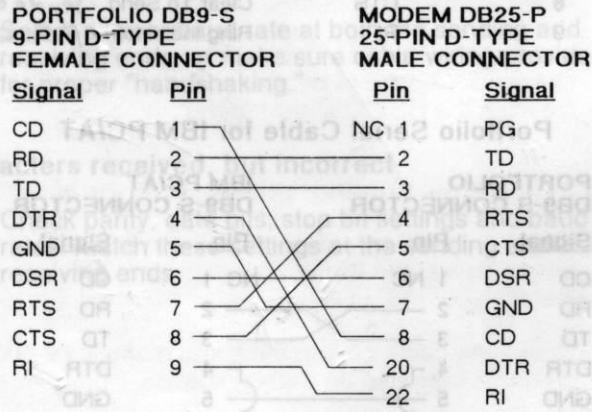
Portfolio Serial Cable for IBM PC/AT



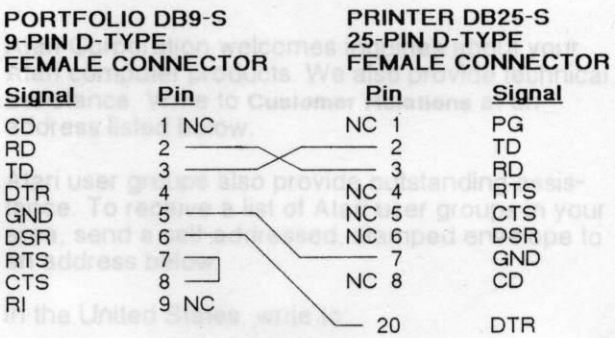
Portfolio Serial Cable for IBM PC/XT



Portfolio Serial Cable for Modem



Portfolio Serial Cable for Typical Printer



Portfolio Serial Cable for Typical Printer

Portfolio Serial Cable for Modem

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90 Gough Road
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In the United Kingdom, write to:

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Berkshire SL2 5BZ

Please add to the outside of the envelope: **User Group List** and the name of the state where you live, or **Technical Assistance**, or the subject of your letter.

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